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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,201	02/04/2004	David R. Strip	86843AJA	4246

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EXAMINER

SARKAR, ASOK K

ART UNIT

PAPER NUMBER

2891

DATE MAILED: 06/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/772,201	STRIP, DAVID R.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Asok K. Sarkar	2891	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 February 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>11/3/2004</u>   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 12 is objected to because of the following informalities: the word "sheets" should be changed to "sheet". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 – 3, 6, 7, 11 – 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Cok, US 2004/0061439.

Regarding claims 1 and 15, Cok teaches a method of manufacturing a flat panel light emitting device having predetermined dimensions, comprising:

- forming an area of light emitting materials of OLED on a substrate, the area having dimensions larger than the predetermined dimensions as shown in Figs. 5 and 6; and

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- cutting a portion having the predetermined dimensions from the substrate to form the flat panel light emitting device with reference to Fig. 5 in paragraphs 24 – 31 and 35.

Regarding claims 2 and 3, Cok teaches the device is a light source for area illumination in paragraph 2.

Regarding claim 6, Cok teaches connecting the light emitting elements in parallel in paragraph 20.

Regarding claim 7, Cok teaches the light emitting area includes an array of light emitting elements and the flat-panel light emitting device is a display in paragraph 3.

Regarding claims 12 – 14, Cok teaches the substrate is a web, sheet, flexible and rigid in paragraphs 27 – 30.

Regarding claim 16, Cok teaches forming elongated light emitting elements with reference to Fig. 5.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cok, US 2004/0061439 in view of Daniels, US 2005/0025881.

Cok fails to teach light source is a back light.

Daniels teaches that the OLED devices can be used for display backlighting in paragraph 2 for the benefit of using them for flexible displays in paragraph 10.

Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to modify Cok and use the device also for display backlighting for the benefit of using them for flexible displays as taught by Daniels in paragraph 10.

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cok, US 2004/0061439 in view of Daniels, US 2005/0025881.

Cok fails to teach wherein the elements of the array each include three distinct light emitting regions, wherein one region emits red, one region emits green, and one region emits blue.

Daniels teaches that OLED layers can include three distinct light emitting regions, wherein one region emits red, one region emits green, and one region emits blue for the benefit of manufacturing a full color display in paragraph 12.

Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to modify Cok and form the array so that each include three distinct light emitting regions, wherein one region emits red, one region emits green, and one region emits blue for the benefit of manufacturing a full color display as taught by Daniels in paragraph 12.

8. Claims 5, 9, 10 and 17 – 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cok, US 2004/0061439 in view of Grace, US 2002/0196401.

Regarding claim 5, Cok fails to teach connecting the light emitting elements in series.

Grace teaches connecting the light emitting elements in series for the benefit of manufacturing a lightweight large area display in paragraph 8 with reference to Figs. 16 – 18.

Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to modify Cok and connect the light emitting elements in series for the benefit of manufacturing a large area lightweight display device as taught by Grace in paragraph 8.

Regarding claims 9 and 10, Cok fails to teach wherein the device is a passive matrix or an active matrix display.

Grace teaches a continuous manufacturing process for making passive matrix or an active matrix display device in paragraphs 155, 164 and 167 for the benefit of manufacturing a large area display of lightweight in paragraph 8.

Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to modify Cok and form the device as a passive matrix or an active matrix display for the benefit of manufacturing a large area lightweight display device as taught by Grace in paragraph 8.

Regarding claims 17 and 18, Grace teaches continuous formation of array panels with reference to Figs. 7 and 10. Cok in view of Grace fails to teach the step of determining an optimum arrangement of multiple light emitting devices having one or more or multiple predetermined dimensions to be cut from the array.

However, it would have been obvious to one with ordinary skill in the art at the time of the invention to modify Cok in view of Grace and determine an optimum arrangement of multiple light emitting devices having one or more or multiple predetermined dimensions to be cut from the array since the number of arrays required for a device will depend on the size of the display for the device.

9. Claims 19 – 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cok, US 2004/0061439 in view of Grace, US 2002/0196401 and Hermens, US 5,706,069.

Regarding claims 19 – 22, Cok teaches about electrically connecting the light emitting elements, but fails to teach the steps of providing electrical conductors between the light emitting elements and the periphery of the portion, providing a cover over the light emitting device, leaving the electrical conductors extending beyond the cover and sealing the cover to the substrate to encapsulate the light emitting materials between

the substrate and the cover and further comprising the step of removing overlying materials to expose the electrical contacts beyond the cover.

Grace teaches providing electrical conductors between the light emitting elements with reference to Figs. 16 – 18, and the periphery of the portion, providing a cover over the light emitting device, and sealing the cover to the substrate to encapsulate the light emitting materials between the substrate and the cover in paragraph 5 for the benefit of manufacturing a large area display of lightweight in paragraph 8.

Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to modify Cok and provide electrical conductors between the light emitting elements and the periphery of the portion, providing a cover over the light emitting device, and sealing the cover to the substrate to encapsulate the light emitting materials between the substrate and the cover for the benefit of manufacturing a large area display of lightweight as taught by Grace in paragraph 8.

Hermens teaches making a large area display device where he teaches leaving the electrical conductors extending beyond the cover and sealing the cover to the substrate to encapsulate the light emitting materials between the substrate and the cover and further comprising the step of removing overlying materials to expose the electrical contacts beyond the cover with reference to Fig. 1 and associated descriptions in the disclosure for the benefit of producing display devices more efficiently.

Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to modify Cok and leave the electrical conductors extending



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beyond the cover and sealing the cover to the substrate to encapsulate the light emitting materials between the substrate and the cover and further comprising the step of removing overlying materials to expose the electrical contacts beyond the cover for the benefit of producing display devices more efficiently as taught by Hermens.

***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Asok K. Sarkar whose telephone number is 571 272 1970. The examiner can normally be reached on Monday - Friday (8 AM- 5 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William B. Baumeister can be reached on 571 272 1722. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Asok Kumar Sarkar*

Asok K. Sarkar  
May 24, 2005

Primary Examiner